

What is claimed is:

1. A method for making a lithographic printing plate comprising the steps of:

light-exposing to infrared radiation, a heat-sensitive presensitized plate  
5 of a positive-working mode for use in making a lithographic printing plate,  
said presensitized plate comprising a substrate and an image recording  
layer which is formed thereon and comprises a novolak resin containing  
xylenol as a monomer component and an infrared absorbing dye; and

developing the light-exposed plate with an alkaline developing solution  
10 comprising at least one surfactant selected from the group consisting of  
anionic surfactants and amphoteric surfactants.

2. The method of claim 1, wherein the xylenol used in the novolak resin  
is at least one selected from the group consisting of 3,5-xylenol, 2,3-xylenol,  
15 2,5-xylenol and 3,4-xylenol.

3. The method of claim 1, wherein the novolak resin containing xylenol  
as a monomer component has a weight-average molecular weight of 500 to  
10,000.

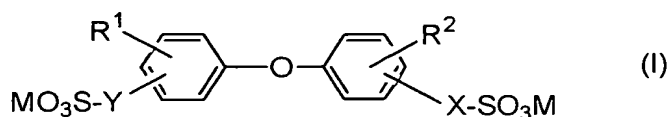
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4. The method of claim 1, wherein the developing solution comprises at  
least one anionic surfactant.

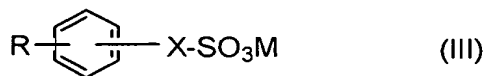
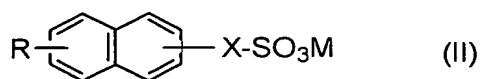
5. The method of claim 1, wherein the anionic surfactant in the  
25 developing solution is selected from the group consisting of fatty alcohol  
sulfuric ester salts, higher alkyl ether sulfate salts, aryl ether sulfate salts,  
alkyl aryl sulfonate, aliphatic alcohol phosphoric ester salts, alkyl amide  
sulfonate salts, sulfonate salts of bibasic aliphatic ester, hydroxyalkane

sulfonate salts, alkane sulfonate salts, alkyl diphenylether sulfonate salts, diphenylether disulfonate salts, dialkyl sulfosuccinate salts, olefin sulfonate salts, linear alkyl benzene sulfonate salts, branched alkyl benzene sulfonate salts, alkyl naphthalene sulfonate salts, alkyl phenoxy polyoxyethylene  
 5 propyl sulfonate salts, polyoxyethylene alkyl sulfophenylether salts, disodium N-alkyl sulfosuccinate monoamide and petroleum sulfonates.

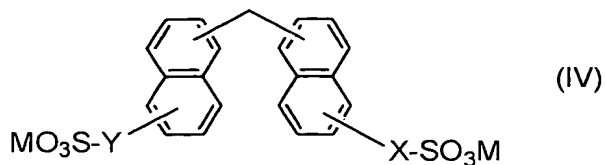
6. The method of claim 1, wherein the anionic surfactant in the developing solution is selected from the group consisting of aromatic anionic  
 10 surfactants represented by the following formula (I), (II), (III) or (IV):



wherein  $\text{R}^1$  and  $\text{R}^2$  independently represent hydrogen atom or an alkyl group which may be in the form of linear or branched chain, X and Y independently represent a single bond or a formula :  $-\text{O}-(\text{CH}_2\text{CH}_2\text{O})_n-$  (n is  
 15 an integer of from 1 to 100.), and M represents a monovalent alkali metal,



wherein, R represents hydrogen atom or an alkyl group which may be in the form of linear or branched chain, X represents a single bond or a formula :  $-\text{O}-(\text{CH}_2\text{CH}_2\text{O})_n-$  (n is an integer of from 1 to 100.), and M represents a  
 20 monovalent alkali metal,



wherein X and Y independently represent a single bond or a formula :  
 $-\text{O}-(\text{CH}_2\text{CH}_2\text{O})_n-$  (n is an integer of from 1 to 100.), and M represents a monovalent alkali metal.

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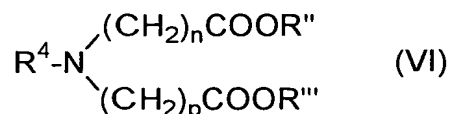
7. The method of claim 1 wherein the developing solution comprises at least one amphoteric surfactant.

8. The method of claim 1 wherein the amphoteric surfactant is selected from the group consisting of amino acid-type amphoteric surfactants and betaine-type amphoteric surfactants.

9. The method of claim 1 wherein the amphoteric surfactant is selected from amino acid-type amphoteric surfactants.

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10. The method of claim 8 wherein the amino acid-type amphoteric surfactant is selected from the compounds represented by the following formula (V) or (VI):

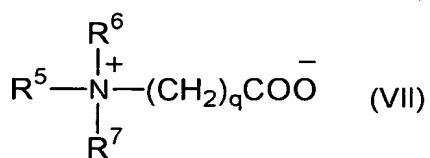


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wherein each  $\text{R}^3$  and  $\text{R}^4$  represents a hydrocarbon group having carbon

atoms of from 2 to 30, and each R', R'' and R''' represents a hydrogen atom or a monovalent alkali metal, and each m, n and p represents an integer of from 1 to 10.

- 5 11. The method of claim 8 wherein the betaine-type amphoteric surfactant is selected from the group consisting of the compounds represented by the following formula (VII):



- 10 wherein R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> independently represent a hydrocarbon group having carbon atoms of from 1 to 30, and q represents an integer of from 1 to 10.

12. The method of claim 1 wherein the developing solution comprises at least one surfactant selected from the group consisting of anionic  
15 surfactants and amphoteric surfactants in an amount of from 0.001 to 10% by weight.